

ABSTRACT

The ramped valve yoke is utilized in a hydraulic reciprocating motor. The uniqueness of this valve yoke is the profile of the surface on which a ball-detent mechanism rides. The profile ensures the ball-detent will always snap into a position on either end of the profile and prevents the ball-detent from stopping on the profile. This action ensures the switching valve of a hydraulic reciprocating motor will always be fully engaged in either one of two positions and will never stop half way between positions.